CRIMSON POWDER[1]

For rocket Parachute Ejection Charge

Crimson Powder has certain advantages over *Black Powder*, including:

- lower combustion temperature which minimizes heat damage to the rocket
- higher impetus (i.e. more potent)
- combustion residue is odourless and cleans up readily with warm water

Ingredients to make approximately 10 grams of *Crimson Powder*:

Potassium Nitrate	6.2 grams
Ascorbic acid	4.5 grams*
Red iron oxide	0.5 gram
Water, hot	30 ml

*If using Vitamin C tablets, use 11 tablets of 500 mg each (Vitamin C tablets are typically 83% ascorbic acid, 17% cellulose filler)

Place all constituents into a pot containing the hot water. Stir until potassium nitrate and ascorbic acid are fully dissolved.

If Vitamin C tablets are used, it will be necessary to strain through a double layer of paper towel (or similar filter material) to remove cellulose filler.

Boil mixture in a deep fryer or electric skillet until **most** of water has evaporated and a **wet** "fluid paste" remains, being careful not dry out the mixture.

Scrape paste into a thin layer onto a shallow pan lined with aluminum foil.
Place in a desiccator** to dry thoroughly. This typically takes a few days.

Using mortar & pestle, grind up dried mixture to a **granular** consistency. *To ensure suitable combustion, do not grind to a fine powder.* Ideally, the product should be sifted, with only the product screened between #60 and #10 mesh sieves being retained.

Store in a sealed jar with silica gel or calcium chloride. Crimson Powder absorbs moisture and must be kept dry to retain potency.

WARNING: DRY FORM IGNITES VERY EASILY & BURNS VERY FAST. WEAR PROTECTIVE GEAR (FACE SHIELD, LEATHER GLOVES, ETC.) AT ALL TIMES WHILE PREPARING & HANDLING. DO NOT MAKE MORE THAN 10 GRAMS AT A TIME.

** A desiccator can be easily made by spreading a 2 or 3 cm. layer of Calcium Chloride (commonly available as a drying agent) over the bottom of a suitable Tupperware container. Make sure the lid is fitted snuggly.

Crimson Powder sample being burned

View video at

www.nakka-rocketry.net/video/crimson_powder.mpg